Liverpool John Moores University

Title:	Disease and Infection Control
Status:	Definitive
Code:	**5502YAUZOO** (127957)
Version Start Date:	01-08-2021
Owning School/Faculty:	Biological and Environmental Sciences
Teaching School/Faculty:	Yunnan Agricultural University

Team	Leader
Rachael Symonds	Y

Academic Level:	FHEQ5	**Credit Value:**	20	**Total Delivered Hours:**	168
Total Learning Hours:	200	**Private Study:**	32		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	117
Practical	41

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Written exam covering lecture material for Understand the method of describing the behaviour and understand the population phenomena, distribution and influencing factors of the behaviour	14	2
Test	Test	Test covering material taught in Understand the method of describing the behaviour and understand the population phenomena, distribution and influencing factors of the behaviour	6	
Exam	Exam	Written exam covering Traditional Chinese Veterinary	14	2

Category	Short Description	Description	Weighting (%)	Exam Duration
		Medicine material		
Test	Test	Practical laboratory test covering Traditional Chinese Veterinary Medicine	6	
Test	Test	In class test covering animal laboratory experiments	6	
Exam	Exam	Written exam covering animal laboratory experiments	14	2
Test	Test	In class test covering animal behaviour	6	
Exam	Exam	Written exam covering animal behaviour	14	2
Test	Test	In class test covering animal infectious diseases	6	
Exam	Exam	Written exam covering animal infectious diseases	14	2

Aims

Disease infection and control is a diverse module which covers diagnostics and treatment. Clinical diagnostics studies theories and methods for the diagnosis of animal diseases. It covers methods in taking a medical history, clinical examination and laboratory inspection, disease information collection and analysis of clinical symptoms, clarify the symptoms of pathological process, determine the nature of the disease and categories and making a diagnosis. This course will also cover nutrition, environment, disease control in animals including common methods and skills to conduct animal experiments, and acquire the national related laws and rules in the management of laboratory animal. This course will cover the occurrence and prevalence of animal infectious diseases and the science of preventing and eliminating these infectious diseases. Zoonotic diseases are the most serious diseases to the breeding industry. They may not only cause the death of a large number of livestock and poultry and the loss of livestock products, but also affect people's life and foreign trade. Therefore, the prevention and study of livestock and poultry infectious diseases has always been the world's attention, and in the field of veterinary science occupies the first place. Traditional Chinese Veterinary Medicine is one form of treatment that is covered in this module. It enables students to master the basic theory and diagnostic methods of Traditional Chinese Veterinary medicine, understand some knowledge of herbs, prescriptions and acupuncture, can use inspection, palpation, percussion and auscultation to determine whether diseases exist and its name and therapeutic principles and methods. The relationships between behaviour feeding and management conditions is also covered.

Learning Outcomes

After completing the module the student should be able to:

1 Understand animal clinical diagnostic technology and basic methods in clinical examination.

2	Ability to analyse , prevent and diagnose major zoonoses.
3	Understand the collection, processing, property, compatibility and does of Chinese herbal medicine.
4	Understand the construction of common experimental animal models and their application in scientific research.
5	Through the practice of the course project, cultivate the ability to recognise and find problems and team cooperation solutions.
6	Understand the method of describing the behaviour and understand the population phenomena, distribution and influencing factors of the behaviour.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Written exam	1	2	4	6	5	
Test	1	2	4	6	5	
Written exam	1	2	3	4	6	5
Test	1	2	3	4	6	5
Test	1	2	6	5		
Written exam	1	2	4	6	5	
Test	1	2	4	6	5	
Written exam	1	2	4	6	5	
Test	1	2	4	6	5	
Written Exam	1	2	4	6	5	

Outline Syllabus

This module includes diagnostic methodology, symptom (syndrome) and diagnostic methodology. Diagnosis is based on symptoms and other clinical data. In order to obtain diagnostic symptoms and other clinical data, veterinarians must use appropriate examination equipment and methods in their clinical practice. The discipline that studies the diagnostic principles, operational methods, indications, and considerations of these methods is called diagnostic technology, or diagnostic technology. Veterinary clinical examination method is based on accurate, convenient, rapid, safe and cheap. According to this principle, there are many clinical methods to choose from, but they mainly include inquiry, physical examination, laboratory examination and imaging diagnosis. Symptoms are pathological abnormalities that an animal presents. Animal disease symptom expression is more complex, the main factor that decides symptom expression form is the anatomical structure of the animal, physiology function, physical ability and disease characteristic, if pathogeny, place of occurrence, injury degree, pathological property, careful clinical examination and screening is needed. In order to reveal the essence of the disease and establish an accurate diagnosis, the symptoms and data

obtained through clinical examination must be analyzed in depth and comprehensively according to certain methods and procedures and principles. This process is the diagnostic methodology. The concepts, history, fundamental features and learning methods of Traditional Chinese Veterinary medicine; basic knowledge such as five elements of Yin and Yang, viscera, meridian, qi-blood and body fluids, pathogenesis, four diagnostic methods, eight-principle syndrome differentiation, viscera syndrome differentiation and therapeutic principles and methods; the collection, classification, function, processing, storage, property, compatibility and does of Chinese herbal medicine; the variation, dosage form and usage of Chinese medicinal formulae; acupuncture and its points and treatment of common diseases. The basic concepts of experimental animal science, the similarity of mouse and human genome as the basis of animals as human substitutes, the diversity and scientific research purposes of experimental animals, the physiological and anatomical characteristics of commonly used experimental animals, the overview of model animals, model animals, disease models, the selection of experimental animals and Animal experiment design, feeding management of experimental animals in scientific research experiments, feeding management of experimental animals in scientific research experiments, safety management of experimental animals and animal experiments, common disease animal models and medical applications, infectious disease animal models and research, common experimental methods and inspection methods, common experimental methods and inspection methods. Through the study of this course, students are required to understand the development direction, main research methods and means of this subject, master the basic principles and methods of animal behavior research, and be able to use the knowledge learned to analyze and solve practical problems in animal production. To enable students to understand the activity patterns of livestock (avian) and create conditions suitable for livestock habits, so as to make full use of livestock resources and increase labor productivity in animal husbandry. Through the course, students are required to: understand the development direction of the subject, the main research methods and means, master the basic principles and methods of animal behavior research, and use the knowledge learned to analyze and solve practical problems in animal production. The concept of zoonotic diseases, the achievements in the prevention and control of zoonotic diseases in China and the main problems existing at present. The occurrence, development and characteristics of infectious diseases. Preventive measures and extermination measures in case of epidemic; Main methods and principles of laboratory diagnosis of zoonotic diseases. Currently important zoonotic bacterial disease such as e. coli disease, brucellosis, streptococcus disease, anthrax, pasteurella disease, salmonella disease, harm serious toxicity of zoonoses infectious diseases such as foot and mouth disease, influenza, the clinical characteristic of rabies and transmissible spongiform encephalopathy disease, etiology, popular distribution, key points of diagnosis and control methods. Swine fever, porcine reproductive and respiratory syndrome, porcine infectious gastroenteritis and epidemic diarrhea, porcine pseudorabies, porcine pseudorabies, porcine circovirus type 2 infection, porcine infectious pleural pneumonia and other main swine diseases pathogenic pathogens, clinical manifestations and pathological changes, and the above disease control points. Pathogenic agents, clinical manifestations and pathological changes of Newcastle disease, avian leukemia, avian bursal disease and marek's disease.

Learning Activities

The module content will be delivered through lectures and several stage of practical activities and a final exam, to promote the achievement of learning goals.

Notes

This module is for individuals to develop an understanding of the disease and infection diagnosis and control methods developments, principles and application**,** master the basic principles and methods of animal behaviour research, and use the knowledge learned to analyse and solve practical problems in animal production. Through undergraduate study, students of this major will have the ability to effectively apply the theoretical knowledge and skills they have learned to diagnose diseases and formulate effective prevention and control measures.